

RAW SEQUENCE LISTING

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Application Serial Number: 10/534,657
Source: IFWP
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IFWP

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DATE: 08/02/2006

PATENT APPLICATION: US/10/534,657

TIME: 08:49:32

Input Set : A:\40184-3.APP

Output Set: N:\CRF4\08022006\J534657.raw

3 <110> APPLICANT: Ding, Jeak Ling
 4 Lim, Eng Hwa
 5 Lam, Toong Jin
 6 National University of Singapore
 8 <120> TITLE OF INVENTION: Recombinant Vitellogenin Enriched Feed
 10 <130> FILE REFERENCE: 040184-000300US
 12 <140> CURRENT APPLICATION NUMBER: US 10/534,657
 C--> 13 <141> CURRENT FILING DATE: 2006-01-27
 15 <150> PRIOR APPLICATION NUMBER: US 60/425,263
 16 <151> PRIOR FILING DATE: 2002-11-12
 18 <150> PRIOR APPLICATION NUMBER: WO PCT/SG03/00266
 19 <151> PRIOR FILING DATE: 2003-11-12
 21 <160> NUMBER OF SEQ ID NOS: 24
 23 <170> SOFTWARE: PatentIn Ver. 2.1
 25 <210> SEQ ID NO: 1
 26 <211> LENGTH: 5511
 27 <212> TYPE: DNA
 28 <213> ORGANISM: *Oreochromis aureus*
 30 <220> FEATURE:
 31 <223> OTHER INFORMATION: vitellogenin (Vtg1) precursor mRNA, egg yolk
 32 protein precursor mRNA
 34 <400> SEQUENCE: 1
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129 <210> SEQ ID NO: 2

130 <211> LENGTH: 1788

131 <212> TYPE: PRT

132 <213> ORGANISM: *Oreochromis aureus*

134 <220> FEATURE:

135 <223> OTHER INFORMATION: vitellogenin (Vtg1) precursor mRNA, egg yolk

136 protein precursor mRNA

138 <400> SEQUENCE: 2

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139 Met Arg Val Leu Val Leu Ala Leu Ala Val Ala Leu Ala Val Gly Asp
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143           20           25           30
145 Lys Tyr Glu Ala Val Leu Met Gly Gly Leu Pro Glu Glu Gly Leu Ala
146           35           40           45
148 Arg Ala Gly Val Lys Ile Arg Gly Lys Val Leu Ile Ser Ala Thr Ser
149           50           55           60
151 Ala Asn Asp Tyr Ile Leu Lys Leu Val Asp Pro Gln Leu Leu Glu Tyr
152           65           70           75           80
154 Ser Gly Ile Trp Pro Lys Asp Pro Phe His Pro Ala Thr Lys Leu Thr
155           85           90           95
157 Thr Ala Leu Ala Thr Gln Leu Ser Thr Pro Ile Lys Phe Glu Tyr Thr
158           100          105          110
160 Asn Gly Val Val Gly Arg Leu Ala Ala Pro Pro Gly Val Ser Thr Thr
161           115          120          125
163 Val Leu Asn Ile Tyr Arg Gly Ile Ile Asn Leu Leu Gln Leu Asn Val
164           130          135          140
166 Lys Lys Thr Gln Asn Val Tyr Glu Met Gln Glu Ser Gly Ala His Gly

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169 Val Cys Lys Thr Asn Tyr Val Ile Arg Glu Asp Ala Arg Ala Glu Arg
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172 Ile His Leu Thr Lys Thr Lys Asp Leu Asn His Cys Gln Glu Lys Ile
173          180          185          190
175 Met Lys Ala Ile Gly Leu Glu His Val Glu Lys Cys His Asp Cys Glu
176          195          200          205
178 Ala Arg Gly Lys Ser Leu Lys Gly Thr Ala Ser Tyr Asn Tyr Ile Met
179          210          215          220
181 Lys Pro Ala Pro Ser Gly Ser Leu Ile Met Glu Ala Val Ala Arg Glu
182 225          230          235          240
184 Val Ile Glu Phe Ser Pro Phe Asn Ile Leu Asn Gly Ala Ala Gln Met
185          245          250          255
187 Glu Ser Lys Gln Ile Leu Thr Phe Leu Asp Ile Glu Asn Thr Pro Val
188          260          265          270
190 Asp His Ala Arg Tyr Thr Tyr Val His Arg Gly Ser Leu Gln Tyr Glu
191          275          280          285
193 His Gly Ser Glu Ile Leu Gln Thr Pro Ile His Leu Leu Arg Val Thr
194          290          295          300
196 His Ala Glu Ala Gln Ile Val Ser Thr Leu Asn His Leu Val Ala Ser
197 305          310          315          320
199 Asn Val Ala Lys Val His Glu Asp Ala Pro Leu Lys Phe Val Glu Leu
200          325          330          335
202 Ile Gln Val Met Arg Val Ala Arg Phe Glu Thr Ile Glu Ser Leu Trp
203          340          345          350
205 Ala Gln Phe Lys Ser Arg Pro Asp His Arg Tyr Trp Leu Leu Asn Ala
206          355          360          365
208 Val Pro His Ile Arg Thr His Ala Ala Leu Lys Phe Leu Ile Glu Lys
209          370          375          380
211 Leu Leu Ala Asn Glu Leu Ser Glu Thr Glu Ala Ala Met Ala Leu Leu
212 385          390          395          400
214 Glu Cys Leu His Ser Val Thr Ala Asp Gln Lys Thr Ile Glu Leu Val
215          405          410          415
217 Arg Ser Leu Ala Glu Asn His Arg Val Lys Arg Asn Ala Val Leu Asn
218          420          425          430
220 Glu Ile Val Met Leu Gly Trp Gly Thr Val Ile Ser Arg Phe Cys Lys
221          435          440          445
223 Ala Gln Pro Ser Cys Ser Ser Asp Leu Val Thr Pro Val His Arg Gln
224          450          455          460
226 Val Ala Glu Ala Val Glu Thr Gly Asp Ile Asp Gln Leu Thr Val Thr
227 465          470          475          480
229 Leu Lys Cys Leu Asp Asn Ala Gly His Pro Ala Ser Ile Lys Thr Ile
230          485          490          495
232 Met Lys Phe Leu Pro Gly Phe Gly Ser Ala Ala Ala Arg Val Pro Leu
233          500          505          510
235 Lys Val Gln Val Asp Ala Val Leu Ala Leu Arg Arg Ile Ala Lys Arg
236          515          520          525
238 Glu Pro Lys Met Val Gln Glu Ile Ala Ala Gln Leu Leu Met Glu Lys
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247 Lys Glu Lys Asn Leu Gln Val Val Ser Phe Val Tyr Ser Tyr Met Lys
248                    580                    585                    590
250 Ala Met Ala Lys Thr Thr Ser Pro Asp His Val Ser Val Ala Ala Ala
251                    595                    600                    605
253 Cys Asn Val Ala Leu Arg Phe Leu Asn Pro Lys Leu Gly Arg Leu Asn
254    610                    615                    620
256 Phe Arg Tyr Ser Arg Ala Phe His Val Asp Thr Tyr Asn Asn Ala Trp
257 625                    630                    635                    640
259 Met Met Gly Ala Ala Ala Ser Ala Val Leu Ile Asn Asp Ala Ala Thr
260                    645                    650                    655
262 Val Leu Pro Arg Met Ile Met Ala Lys Ala Arg Thr Tyr Met Ala Gly
263                    660                    665                    670
265 Ala Tyr Val Asp Ala Phe Glu Val Gly Val Arg Thr Glu Gly Ile Gln
266    675                    680                    685
268 Glu Ala Leu Leu Lys Arg Arg His Glu Asn Ser Glu Asn Ala Asp Arg
269    690                    695                    700
271 Ile Thr Lys Ile Lys Gln Ala Met Arg Ala Leu Ser Glu Trp Arg Ala
272 705                    710                    715                    720
274 Asn Pro Ser Ser Gln Ala Leu Ala Ser Met Tyr Val Lys Val Phe Gly
275                    725                    730                    735
277 Gln Glu Ile Ala Phe Ala Asn Ile Asp Lys Ser Lys Val Asp Gln Leu
278                    740                    745                    750
280 Ile Gln Phe Ala Ser Gly Pro Leu Arg Asn Val Phe Arg Asp Ala Val
281    755                    760                    765
283 Asn Ser Val Leu Ser Gly Tyr Ala Thr His Phe Ala Lys Pro Met Leu
284    770                    775                    780
286 Leu Gly Glu Leu Arg Leu Ile Leu Pro Thr Thr Val Gly Leu Pro Met
287 785                    790                    795                    800
289 Glu Ile Ser Leu Ile Thr Ser Ala Val Thr Ala Ala Ser Val Asp Val
290                    805                    810                    815
292 Gln Ala Thr Val Ser Pro Pro Leu Pro Val Asn Tyr Arg Val Ser Gln
293                    820                    825                    830
295 Leu Leu Glu Ser Asp Ile Gln Leu Arg Ala Thr Val Ala Pro Ser Leu
296    835                    840                    845
298 Ala Met Gln Thr Tyr Ala Phe Met Gly Val Asn Thr Ala Leu Ile Gln
299    850                    855                    860
301 Ala Ala Val Met Thr Lys Ala Lys Val Tyr Thr Ala Val Pro Ala Gln
302 865                    870                    875                    880
304 Ile Lys Ala Arg Ile Asp Ile Val Lys Gly Asn Leu Lys Val Glu Phe
305                    885                    890                    895
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308    900                    905                    910
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311    915                    920                    925
313 Pro Leu Ile Ser Ser Glu Thr Ala Ser Gln Leu Ser Lys Ala Ser Leu

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L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date